

MEMORANDUM

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TO: List

FROM: A. P. Williams, Jr.

SUBJECT: REPORT ON INFORMAL INTELLIGENCE CONFERENCE

COPIES TO: B. Augenstein, H. Heymann, H. Rowen

DATE: 6/26/69

MEMO NO.: M-4182

Attached is a short report which Hans Heymann and I drafted before our separate departures to Southeast Asia. It does not pretend to cover all the ideas presented at the conference but rather is designed to give ARPA/DIA some ideas for possible next steps.

We would appreciate any specific comments you might have -- particularly ones that serve to elucidate our very brief examples of research possibilities. Ed Brunner has agreed to incorporate your comments on this draft in a final form and generally to watch over the Santa Monica side of any developments for the next two months. Steve Hosmer has similarly agreed to take care of the Washington side.

Please mark up the attached draft with any comments you might have and return it to Ed Brunner.

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Albert P. Williams, Jr.

APW/js

Attachment: Draft Report

List:

E. Brunner
C. Culp
M. Davies
D. Ellsberg
D. Emerson
S. Hosmer
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W. Jones
S. Kozlov
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C. Wolf, Jr.

Hans Heymann, Jr.
Albert P. Williams, Jr.
June 20, 1969
DRAFT

RESULTS OF INFORMAL RAND CONFERENCE ON
INTELLIGENCE NEEDS FOR NATIONAL SECURITY DECISIONMAKING

A one-day Conference was held at RAND-Santa Monica on Wednesday, June 18, 1969 to explore possibilities for research on the problems of the intelligence community in serving the national security decision process. A list of participants and an informal agenda which provided the basis for the discussion are attached. A brief summary of the results of that Conference follows:

1. Problems Facing the Intelligence Community

The Conference highlighted a number of serious problems facing the intelligence community:

- o Intelligence is coming under closer scrutiny by its Congressional, Administration, and public critics;
- o The cost of the intelligence effort is rising at a time when there is considerable pressure to divert funds from the national security budget to domestic programs;
- o The community is beset by rising demands for its product from consumers who view the product essentially as a free good; and
- o External requests for intelligence add new requirements to a collection system that has no systematic way of disposing of obsolete or irrelevant ones.

2. Consensus and Tone of the Conference

There was general acknowledgment that these problems urgently call for a major analytic effort; that there are a number of problem areas that offer fruitful and feasible subjects for external research; and that a

variety of research approaches and techniques exist that could profitably be applied. The discussions proceeded on a positive and hopeful note and revealed a surprising number of individual participants with a keen interest in personal involvement in a potential research program.

3. Areas for Potential ARPA-sponsored Research

The numerous research possibilities surfaced by the Conference seem to fall into one of the following categories:

A Research aimed at immediate user-producer issues

A substantial number of potential research topics were suggested that require neither the development of novel or particularly sophisticated techniques, nor the kind of access that it might be painful for the intelligence community to grant. In one way or another, these focus on the function of the intelligence community in the national security process. The following is an illustrative sample:

(i) An analytic description of the intelligence community.--What unique role does intelligence play in the national security process? How is it organized institutionally, functionally, and organically? In what sense is it a "community" and in what sense a "trade association?" What is DIA's role within it and impact upon it? In the words of one experienced practitioner at the Conference, "...we've never really defined what we're in business to do."

(ii) An examination of the user-producer relationship.--How do the two communities communicate with each other, both formally and informally? How does communication and responsiveness differ as between CIA, DIA, INR? To what extent does the quality of communication between them hinge upon

personal contacts? What subjects and degrees of interaction does each consider off-limits? What affects the user's perception of the credibility of intelligence? What are the possibilities for breaking down these barriers, and what would be the costs and benefits of doing so?

(iii) An analytic ordering and costing of the external intelligence product.--What is this product in terms of its form, its content, and its use? (Case studies of particular kinds of end products, e.g., SNIE's might be useful). In what way would it be useful to allocate its cost? Is it possible to construct a comprehensive program budget that will display product cost in a way that will enable the user to measure cost against some subjective notion of utility? How can costs be inputted to the intelligence product so that it will constrain users from treating it as a free good?

(iv) Role of intelligence in systematic policy analysis.--To what extent is the policymaker's analysis now determined by the form in which he receives intelligence? Is the intelligence community aware of the information inputs needed for policy analysis? Do policymakers themselves understand these needs? How receptive are users and producers of intelligence to a far greater emphasis on making uncertainty in estimates explicit, such as by treating in detail alternative outcomes, alternative environments, and so forth?

B. Research aimed at developing analytic tools with payoffs for the longer run

Considerable interest was expressed in the application of more highly sophisticated techniques and the adaptation of some existing research approaches to the problems of the intelligence community. Examples are:

(i) The use of gaming.--Experience with war gaming suggests that the "value" of intelligence might be indicated by game iterations with different forms and different levels of information.

(ii) Delphi techniques.--This methodology offers an iterative mechanism for refining estimates by a number of experts and clarifying the points of difference; the technique has obvious intelligence applications.

(iii) Computer simulation of conflict.--Work in this area is still at an early stage of development, and the models involved are as yet crude, but the technique may provide applicable results in the more distant future.

(iv) The introduction of uncertainty into computer models of strategic force exchange.--Some preliminary work done on the explicit introduction of multiple factors of uncertainty (upwards of 200) into computer models suggests that it may be practical to use expert opinion on degrees of uncertainty in order to arrive at force costs for different levels of confidence regarding so-called "assured destruction." Considerably more refinement is needed, but the application to valuing intelligence which explicitly reduces some elements of uncertainty is obvious.

(v) Decision theory.--Some recent applications of formal decision theory to practical decision questions are shedding light on the components of evaluating information. Although techniques are still in an early stage of development and applications to intelligence problems so far have been minimal, several conference participants argued that some recent theoretical developments offered good prospects for practical payoffs to intelligence in the longer run.

C. Research aimed at problems largely internal to the intelligence community.

Although the Conference discussion skirted sensitive problems within the intelligence community, it was nonetheless clear that some of the largest potential payoffs for research lie in this sphere. A few of the more interesting possibilities discussed were:

(i) Examination of the process by which collection requirements are generated and modified;

(ii) The adaptation of techniques of scientific experiment design to the development of collection systems;

(iii) The value of redundantly collected intelligence which only serves to confirm analytic estimates;

(iv) Cost-benefit analysis of alternative collection systems;

(v) The institution of a system of "track records" for individual analysts or groups within the intelligence community.

4. Personal Interest within Rand

A surprisingly large number of Rand participants in the Conference expressed a lively personal interest in research possibilities in the intelligence/security field. Areas encompassed included: the user-producer relationship; clarifying the external product; the role of intelligence in systematic policy analysis; the use of gaming; Delphi

techniques; the introduction of uncertainty into computer models; and wide applications of decision theory.

5. Some Appropriate Next Steps

The Conference focused primarily on ARPA's first interest, i.e., to explore the desirability and feasibility of research in the intelligence area. The discussion of possible future steps to develop a program was relatively brief. In reviewing this discussion, three approaches to designing a concrete research program suggest themselves as being appropriate, respectively, to the three categories of research listed in Section 3 above.

A. Research feasibility survey

The list of projects in Section 3A constitutes a set of relatively straightforward, relevant research ideas, that would not require highly sophisticated or untried methodologies, but that would require a survey of accessible data and of prior analytic work done within the community, as well as an exploration of interest and willingness to cooperate. Thus a useful first step would be to undertake such a survey by a small team over a relatively short period of time, say, three to six months. In addition to its examination of data, the team would interview both users and producers of intelligence in order to add a sharper focus to the research topics and perhaps to uncover additional topics.

B. Conference with formal papers

The list of projects in Section 3B represents a set of research approaches which appear promising for practical payoffs in the longer run. Since many of these approaches involve application of highly sophisticated research techniques or adaptation of ongoing research activities to intelligence problems, they require further clarification. A useful approach to such clarification would be a carefully planned conference with commissioned papers to provide a forum for a critical examination of these potential techniques. The conference would serve

to sharpen substantially the focus of these techniques and explore their applicability prior to submission of formal research proposals. The lead time for such a conference would be substantial and, realistically speaking, it could hardly be scheduled before January, 1970. Since the informal Conference just held was aimed primarily at defining the problem, little time was devoted to exploring the details of techniques and methods. Hence it is altogether possible that some of the research projects listed in 3B, and now suggested as possible agenda items for a future formal conference, may already be well enough developed to permit direct translation into research proposals without going through the intermediate step of a conference.

C. ARPA-DIA deliberations.

The list of projects in Section 3C constitutes a set of analytic tasks that would involve extensive research within the intelligence community. Such research would require not only a high level of access to sensitive materials, but also a high measure of cooperation within that community. Whether such access and cooperation can in fact be accorded to "outsiders" is a matter for careful exploration by ARPA management with command levels in DIA and perhaps eventually in USIB. The outsider's contribution to this exploratory process would necessarily be limited. It might take the form of discreet personal consulting on clarification of matters of research substance.

INTELLIGENCE/SECURITY CONFERENCE

The Rand Corporation
Santa Monica, California

18 June 1969

Co-Chairmen: Hans Heymann, Jr. and Albert P. Williams, Jr.

Rapporteur: Valentina Laffin

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